Supplier Document Status Stamp

BSC

A. Records Designator: ☐ QA: QA ☒ QA: N/A

B. Procurement Document No. NN-HC4-00239

C. BSC Standard Document No. V0-HX00-NHC4-00239-00149-001-001

D. SUPPLIER DOCUMENT STATUS

1. ☐ WORK MAY PROCEED.
2. ☐ REVISE AND RESUBMIT. WORK MAY PROCEED SUBJECT TO RESOLUTION OF INDICATED COMMENTS.
3. ☐ REVISE AND RESUBMIT. WORK MAY NOT PROCEED.
4. ☐ REVIEW NOT REQUIRED. WORK MAY PROCEED.
5. ☒ FOR INFORMATION ONLY. REVIEW NOT REQUIRED.

PERMISSION TO PROCEED DOES NOT CONSTITUTE ACCEPTANCE OR APPROVAL OF DESIGN DETAILS, CALCULATIONS, ANALYSES, TEST METHODS, OR MATERIALS DEVELOPED OR SELECTED BY THE SUPPLIER AND DOES NOT RELIEVE SUPPLIER FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.

E. REVIEW COPY													
	NVM	NE											
	bs	MK											

F. Area Code NA System Code NA Baseline Level NA

G. DOCUMENT CATEGORY NA

(Attach 3, Attach 4, or SSRS Form as applicable)

H. William Garfield [signature] 2/21/08

RESPONSIBLE ENGINEER/ANALYST (Printed Name and Signature) DATE

Title: Revisions of Right-of-Way Typical Sections Drawing Technical Memo

Supplier Document #: N/A

Supplier Rev.: 00

Supplier Date: 02/19/2008

Reference #: NVT-CD-00195

BSC

Supplier Document Distribution

Complete only applicable items.

QA: N/A

1. Supplier/Subcontractor Name:	Purchase Order/Subcontract No. and Title:	
Nevada Rail Partners	NN-HC4-00239/Revisions to Right-of-Way	
2. BSC Submittal No.:	Revision:	Title:
V0-HX00-NHC4-00239-00149-001	001	Revisions to Right-of-Way Width Typcail Sections Drawing Technical Memo

Responsible Individual:	Name (Print)	Initials	Mailstop	Date	Due Date
	William Garfield	WG	423	02/20/08	02/29/08

DISTRIBUTION

Discipline/Organizations	Abbrev.*	3. Name	Mailstop	4. For Review	5. After Acceptance
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6. Document transmitted contains OUO information? ☐ **Yes** ☒ **No**

*** Use these abbreviations on the Supplier Document Status stamp to indicate reviewers.**

BSC

Transportation Data Pedigree Form

Complete only applicable items.

QA: N/A

Page 1 of 2 4-22-08

Subcontractor:	Item Number/Title/Revision:	Submittal Date:	SRCT No.:
N/A	Technical Memo: Revisions to Right-of-Way Width Typical Sections Drawing	2/19/08	08-00068

Section I. Submittal Information (includes above information)

Submittal Description and Revision Summary for Entire Submittal:

The purpose of this technical memo is to address comments received from the review of the Draft Environmental Impact Statement regarding excessive right-of-way (ROW) width for the rail design.

Special Instructions:

Cross-reference to T06-00025 Route Sections and Structures – Typical Concepts of Structural Features Caliente Rail Corridor (ENG.20070606.0024) Supplemental drawing to NRP-D-SYSM-TY-0002-03.

Section II. Data File Information (Add lines below if needed for additional files. Indicate "Last item" or "End of list" after last line used.)

Filename	Rev.	File Size	Description (File description and revision summary for file)	Application and Version/ Add-in or Extension and Version
ROW Tech Memo Gehner_wSUPP.pdf	00	1,280 KB	Revisions to Right-of-Way Width Typical Sections Drawing technical memo.	Adobe Acrobat 7.0

**********Last Item**********

Section III. Metadata

☐ **GIS Metadata**
All GIS data is preferred in ArcGIS9.1 UTM, NAD1983, Zone11, Feet.

Projection:	
Datum:	
Zone:	
Units:	

☐ **CAD Metadata**
CAD drawings are preferred in **Bentley MicroStation V8 and/or InRoads** and should adhere to established **CAD standards**.

Level descriptions:	
Scale:	
Units of Measurement:	
Horizontal and Vertical Datum:	

Section IV. Data Screening (Completed by BSC personnel)

Acceptable for Review?	Screener Name:	Signature:	Date:
☒ Yes* ☐ No	Cathy Stettler	Cathy Stettler	2/20/08

*If "Yes", Data Storage Location: nvtdata\NRP\Task 7 Route Sections and Structures\08-00068 ROW Width Rev Tech Memo Rev 00 02-19-08

Comments: *(Justification for returning submittal is **required**; other comments are optional.)*

Section V. STR/STR Support Disposition of Submittal

Process for Review?	** If "No", date returned:	Comments:
☒ Yes ☐ No**		

STR/STR Support Name:	Signature:	Date:
Wm. Garfield	Wm. Garfield	2/20/08

TECHNICAL MEMO

Title: Revisions to Right-of-Way Width Typical Sections Drawing

From: Phil Gehner
Bechtel SAIC

To: Mike West
Potomac-Hudson Engineering

Date: 02/19/2008

This purpose of this technical memo is to address comments received from the review of the Draft Environmental Impact Statement regarding excessive right-of-way (ROW) width for the rail design.

The approach used in the development of the conceptual design ROW width for the rail alignment was to allow design/construction flexibility to change location of features such as service roads, and drainage. The current design states a nominal width of the construction ROW at 1,000 feet. Field data collection/analysis and modeling efforts pertaining to hydrology and hydraulics as well as the necessary geotechnical investigations to support the next phase of engineering have not yet been completed. These data will provide the basis for the development of solid design input (determination of soil and hydrologic characteristics necessary for the development of hydrologic crossing structures and roadbed/side slope design) necessary to proceed on to preliminary and final design. The proposed action in the RADEIS is meant to serve as a bounding condition until this more detailed information is obtained.

The conceptual design concept currently has pictured a service road on each side of the roadbed, and has identified this road as 24' wide and a fire break as well. Although a service road is a necessary part of the railroad construction, operations and maintenance, it was incorrectly represented to be a requirement for the road to be located on each side of the roadbed in the Construction Plan Caliente Rail Corridor document, Section 4.5.4, dated May 15, 2007 [DIRS 180922]. The intent of the service road is to be located only on one side of the roadbed, and in some locations would be classified as a public shared-use road - for both public use and track maintenance. In some areas, public roads would require a slight deviation from their existing location to allow for a more favorable railroad crossing in areas of deep cuts or high embankments. Factors such as topography, cuts, and fill areas will influence the elevation of the service road. In areas where the public roads are not a part of the service road, the road width will narrow from two travel lanes 12' wide (total 24') to a single lane 14' wide.

The current conceptual design has drainage ditches identified as a typical ditch width and are meant to be a bounding condition or "worse case" scenario. This will allow flexibility in design and construction as new information is gathered in support of

advancing the rail design as mentioned above. Such features will be subject to future modification with the advent of new data which may affect the conceptual design such as the existence of wetlands, private property, or environmental concerns. By reducing the access road to only one side, and reducing the width of the service road/roadbed drainage to match surface water flow estimates, land disturbance will be reduced and cost will be reduced.

As such, this memo is intended to serve as a new source document that addresses these comments pertaining to excessive right-of-way width. The original source document is "Route Sections & Structures – Typical Concepts of Structural Features Caliente Rail Corridor", NRP, May 15, 2007. (DIRS 182824)

The following changes have been made to this report, sheet 2 of 22 as a supplemental drawing to Drawing NRP-D-SYSM-TY-0002-03 to reflect the current concept:

1. Changes have been made regarding service road width to allow for rail maintenance vehicles is 14' and 24' for shared-use.
2. Location of the service road will be only on one side of the railbed, and may vary due to topography and other reasons.
3. In some locations, the service road may be located at the subballast level due to drainage concerns, and space limitations.
4. The service road may be omitted in areas such as wetlands and washes.
5. Drainage ditch features shown on sheet 2 represent a maximum condition. The minimum ditch bottom is 3' wide. Ditch width may vary due to estimated quantity of surface water & may be wider to accommodate potential rock falls.
6. Ditches may not be required in areas of embankment & sidehill topography.

Changes to the above document will be made to reflect the six items noted above prior to preliminary design.

See attached supplemental drawing showing these revisions.

NOTES:

① 10' FOOT BENCH EVERY 20' IN ELEVATION ABOVE TOP OF RAIL IN ROCK CUT SECTIONS

② 10' FOOT BENCH EVERY 20' IN ELEVATION BELOW TOP OF RAIL IN FILL SECTIONS

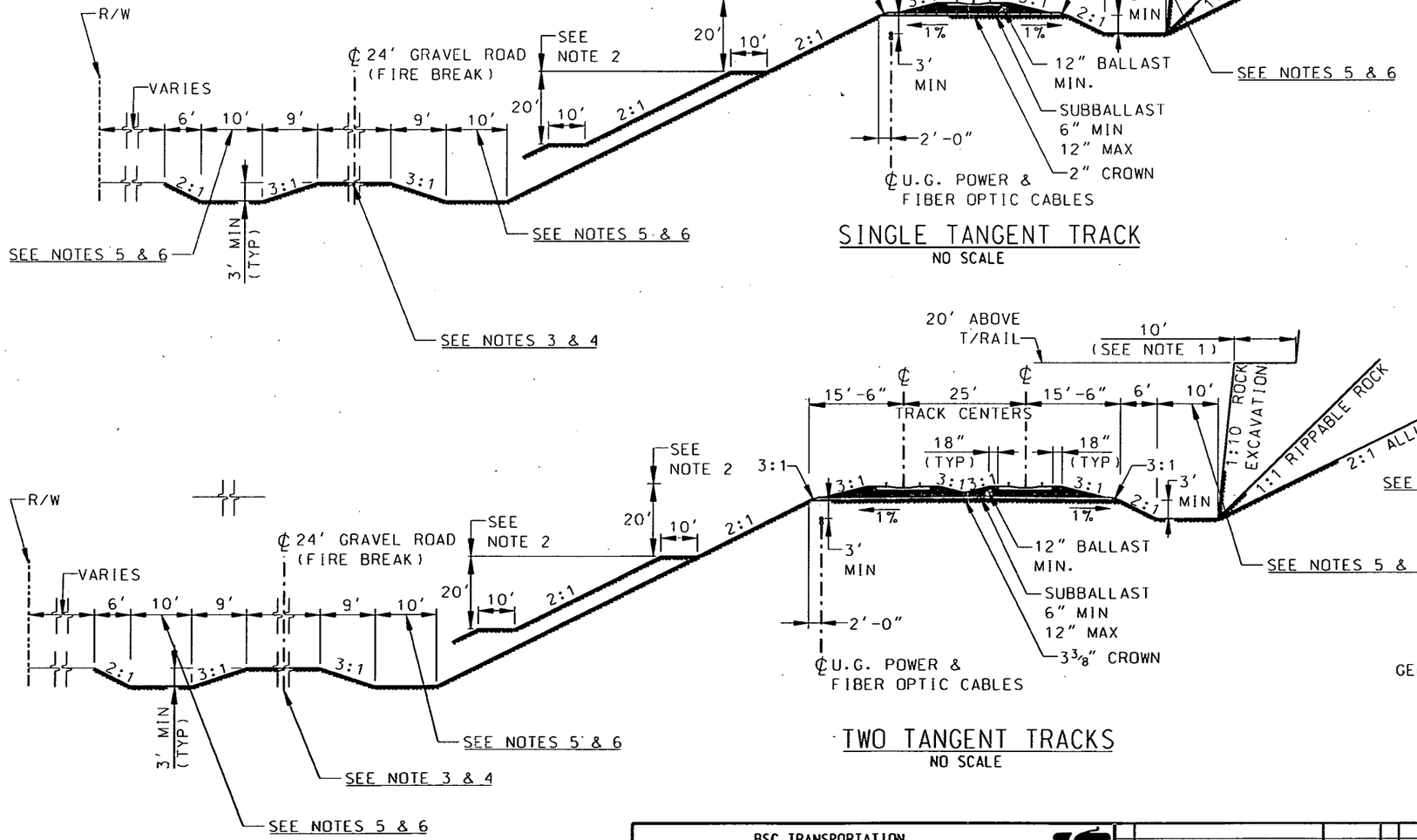
③ GRAVEL SERVICE ROAD WIDTH WILL BE 14' WIDE FOR TRACK MAINTENANCE AND 24' WIDE FOR SHARED USE.

④ THE SERVICE ROAD WILL BE LOCATED ONLY ON ONE SIDE OF THE ROADBED. TOPOGRAPHY AND OTHER FACTORS WILL DETERMINE WHICH SIDE. IN SOME LOCATIONS, THE SERVICE ROAD WILL BE LOCATED AT THE SUB-BALLAST LEVEL OR FOLLOW EXISTING TOPOGRAPHY.

⑤ DITCH WIDTH MAY VARY DUE TO ESTIMATED QUANTITY OF SURFACE WATER & POTENTIAL ROCKFALLS. THE MINIMUM BOTTOM WIDTH IS 3'.

⑥ DITCHES MAY NOT BE REQUIRED IN AREAS OF EMBANKMENT & SIDEHILL TOPOGRAPHY.

⑦ SERVICE ROAD MAY BE OMITTED IN AREAS SUCH AS WETLANDS & WASHES.



SINGLE TANGENT TRACK
NO SCALE

TWO TANGENT TRACKS
NO SCALE

GENERAL NOTE: ALL SLOPES SUBJECT TO FINAL GEOTECHNICAL DESIGN REQUIREMENTS

THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR CONSTRUCTION.

BSC TRANSPORTATION
T08-00068
SUPPLEMENT TO NRP DRAWING NRP-D-SYSM-TY-0002-03
TASK 7 - ROUTE SECTIONS AND STRUCTURES

REV	DESCRIPTION	DATE
S1	ISSUED FOR RA EIS REFERENCE	2/11/08

U.S. DEPARTMENT OF ENERGY
Office of National Transportation

BECHTEL SAIC — Management and Operation of the Office of Civilian Radioactive Waste Management Program

SUPPLEMENTAL TO NRP TYPICAL SECTIONS
SINGLE AND TWO TRACKS ON TANGENT
(Sheet 2 Of 22 - Task 7 Routes Sections and Structures)

SCALE: NONE
DRAWING IDENTIFIER: NVT Sup to NRP-D-SYSW-TY-0002-03
REV: S1
CAD SOFTWARE: MICROSTATION V08.05.02.55

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